Windsor Measures of a Centauri in 1893. By John Tebbutt.

The following measures of  $\alpha$  Centauri were taken with the 8-inch equatorial at the request of Professor T. J. J. See, of Chicago. As there will probably be no other double-star observations from this observatory for the current year, I deem it advisable to send them at once for publication in the Monthly Notices. In all the observations east of the meridian the line joining the observer's eyes was parallel to that joining the components, but in those west of the meridian these lines were at right angles. The scale of weights is from one to five, one denotes the worst, and five the best conditions possible.

Date of Obs.	Position Angle.	No. of Obs.	Distance.	No. of Obs.	Mag. Power.	Hour A between v measures w	vhich <b>t</b> he	Weight 1-5.
1893. '411	•••	<i>"</i>	20.42	10	170	h m 2 45 E	h m 2 20 E	2
·411	206.3	10	•••		230	1 53 E	1 40 E	2
·416	207.0	10	•••		230	0 25 E	о 10 Е	2
·4 <b>1</b> 9	206.8	10	20.02	10	230	2 31 E	1 51 E	3
<b>4</b> 22	206.3	10	20.25	10	300	3 20 E	2 46 E	4
·427	206.9	10	•••	•••	300	0 29 E	0 0	4
<b>.</b> 430	207.1	10	20.59	7	300	2 31 E	1 40 E	4
<b>.</b> 493	207.7	10	20.60	8	300	1 53 W	2 22 W	2
<b>·</b> 496	206.4	10	20.45	8	300	0 54 W	1 27 W	3
•498	207.0	10	•••	•••	300	1 40 W	1 56 W	ı
501	205.9	10	•••		300	0 22 W	o 38 W	I

Weighting each result according to the conditions under which it was obtained, we have the following mean:

Epoch = 1893.442. Position angle = 206''.8. Distance = 20''.38.

Private Observatory, The Peninsula, Windsor, N.S. Wales: 1893 October 27.

Observations of Double Stars made at Sydney Observatory.

(Communicated by H. C. Russell, B.A., F.R.S., Government Astronomer.)

The following list of double stars, believed to be new pairs, were found by Mr. R. P. Sellors between 1890 March and 1893 October, in the course of his double-star work with the  $11\frac{1}{2}$ -inch refractor of Sydney Observatory.

124	Sye	lney Obs	ervations o	of $Doubl$	le Stars.		LIV. 2
No.	No. in Merid. Cat.	R.A. 1900.	S. Decl. 1900.	Epoch.	P. Angle.	Dist.	Mags.
I	β Phœnicis	h m <b>I 2</b>	47 15	91.969	26°3	0.93	4-4
•	St. 430			92.895	24.7	0.00	
	~0.430			92.947	24.1	0.80	
				92.953	24.3	0.97	
2	St. 448	ī 4	47 12	91.969	210±	0.2 ∓	7-9½
_		•	.,	92.895	200'I	3 –	,
				92.953	199.2		
				92.956	200'I	1.09	
3	A G C 1690	I 39	55 22	92.977	179.3	1.0 Ŧ	$8 - 8\frac{1}{2}$
4	A G C 3516	3 10	47 34	92.008	248.0	•••	8-8
•	33	J	17 31	92.036	248.1	0.93	
			,	92.038	249.3	0.92	
5	A G C 4117	3 39	48 33	92.036	187.7	1.81	7-12
,		5 57	1. 33	92.038	188.4	1.67	•
				92.049	188·4	1.81	
6	St. 1898	4 23	53 20	92.038	98·8	0.88	7-9
		. 0	30	92.055	98.0	0.74	
7	Z Puppis	6 27	50 10	93.088	262.9	•••	6-6
	St. 3044	•••	•••	93.104	265.4	0.68	
				93.162	267.2	o·68	
8	St. 4451	8 29	52 52	92.266	303.1	0. <b>2</b> ∓	$6\frac{1}{2}$ - $7\frac{1}{2}$
				92.276	298.9		
				92.320	303.2	0.43	
9	Z C 3683	8 46	63 27	93.156	2'4	1.03	8-9
				93.194	2.7	0.91	
10	A G C 16725	12 10	35 40	91.342	244 ±	1.2 ±	$7\frac{1}{2} - 8\frac{1}{2}$
				91.359	244·I		
ΙΙ	St. 8614	15 46	60 27	91.548	95.3	0.26	$6\frac{1}{2}$ – $8\frac{1}{2}$
				91.253	98.9		
				93.493	93.9	1.00	
12	ZC 2139	16 33	47 51	93.286	178·1	1.03	$8-8\frac{1}{2}$
				93.608	178.2	0.98	
13	Z C 309	18 6	35 14	91.665	43.7	1.2 ±	9–10
14	St. 12307	23 45	52 16	91.934	70.4	0.90	$7-7\frac{1}{2}$

Observatory, Sydney: 1893 October 20.

Downloaded from http://mnras.oxfordjournals.org/ at NERL on May 31, 2015

Observations of Brooks' Comet (c 1893), made at the Royal Observatory, Greenwich.

(Communicated by the Astronomer Royal.)

The observations were made with the East, or Sheepshanks, equatorial, aperture 6.7 inches, by taking transits  $\mathbf{f}$ They are also corrected for the error over two cross-wires at right angles to one another, and each inclined 45° to the parallel of declination. The observations are corrected for refraction, but not for parallax. inclination of the wires and for the motion of the comet.

4	Star.	a	9	O	q		£	£	8	y		¥
t d N	of	59 22 43.5	59 22 38.0	:	:	36 43 58.1	36 43 25.3	:	35 25 14.0	33 16 54.7	33 16 53.4	:
Annt D A	of &.	h m s 12 59 13°05	12 59 13.22	•	:	14 3 59.65	14 3 59.62	•	14 9 13.26	14 18 28.47	14 18 29.42	:
† 2	Comps.	н	H	æ	0	8	33	67	æ	n	4	73
Con for	Refraction.	°.0 °0	0.0	1.0	+0.1	I.0-	-0.I	I.0-	1.0+	<b>4.1</b> –	8.0-	+ 1.5
Log Factor	of Parallax.	0.7785	0.7785	0.4864	0.4751	0.8918	0.8872	0.6440	0.6428	0.8827	0.8821	0.8722
	<b>%−</b> *N.P.D.	- 'i 43''8	+ o 38.4	- 7 53.4	+ 7 16.2	- o 45.7	L.L. I -	-217.3	+ 9 14.7	- Io 55.0	- 5 43.5	+10 21.6
Corr. for	Refraction.	00.0	00.0	10.0+	10.0-	0.00	0.00	00.0	I0.0-	-0.02	10.0-	10.0+
	ot Parallax.	1189.6	1189.6	0504.6	6.4013	6.2326	6.2226	0.8010	9.8012	6.2286	9.2646	6609.6
	Ouserver.	m s + 5 49.87	+ 4 52.17	+0.61 o -	- 0 50.73	+ 0 23.15	+ 0 23.12	+5 12.09	+0 45.02	-0 16.23	-2 25.89	+ 4 29.95
100 E	oserver.	A.C.	:	B,	ĸ		<b>z</b> :	В		:	2	"
an	ar Time.	Nov. 9 15 35 20	9 15 35 20	26 16 49 6	26 16 53 50	Dec. I II 35 6	I II 42 29	2 14 59 47	2 15 0 28	4 II 35 I	4 11 36 15	4 11 51 54